

Abstract of the Disclosure

A digital telemetry system having improved data rate and robustness. The telemetry system has a data transmission cable having a first end and a second end, and is capable of transmitting data between the first and second end on at least two propagation modes. A data source connected at the first end has data transmission circuitry to generate data signals on these propagation modes. A receiver connected to the second end of the wireline cable has a first receive circuitry to receive signals on a first of the at least two propagation modes and a second receive circuitry to receive signals on a second of the at least two propagation modes. An adaptive far-end cross-talk cancellation circuitry connected to the first receive circuitry and to the second receive circuitry cancels out far-end cross-talk between the at least two propagation modes.